

# **Status and Conservation Management of Terrestrial Mollusks of Special Concern in Montana**

Prepared for:  
The U.S. Forest Service

By:  
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Montana Natural Heritage Program  
Natural Resource Information System  
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## EXECUTIVE SUMMARY

This document presents information on the distribution and status of 15 terrestrial mollusk taxa (species and subspecies) of conservation concern in Montana that have been found on or near lands administered by the Northern Region (Region 1), U. S. Forest Service. Included in this group are ten snail taxa and five slug taxa. Each species or subspecies is on the current joint Montana Natural Heritage Program and Montana Fish, Wildlife and Parks Animal Species of Concern list (Carlson 2003), as either a Species of Concern (eight snail and three slug taxa) or On Review (two snail and one slug taxa); one slug species On Review (*Udosarx lyrata*) includes a subspecies (*U. l. russelli*) that is a Species of Concern.

Montana is the type locality (where the species or subspecies was first discovered and upon which the formal description is based) for ten of the mollusk taxa discussed in this report. A review of available literature and unpublished reports, museum records, personal discussions and correspondence, and field survey results provided only 66 locality records for all species and subspecies combined. No species has been reported in Montana at as many as 15 localities, and only two snails have been documented at as many as ten localities. Two snails remain known from single localities each (the type localities), and five other snails and slugs from two to four localities each. To date (2002), terrestrial mollusks of conservation concern have been found on or near seven National Forests in Montana: Beaverhead-Deerlodge, Bitterroot, Flathead, Gallatin, Kootenai, Lewis and Clark, and Lolo.

Of the 66 total localities, Heritage Program zoologists discovered nine since 1997, and two additional localities were first reported in 2001 by other biologists. These results, obtained largely with a minimum of survey effort, indicate that new populations for several of the species of conservation concern are possible, even likely. However, given the history of collecting in the state west of the Continental Divide, it is expected that most of the mollusk taxa on the Heritage list will remain there, although their global and state ranks may ultimately be downgraded.

In this report, species accounts for each taxon are provided that include details of taxonomy and species identification, life history and ecology notes, a distribution map, and comments on status, potential threats, and land ownership at documented (historical and recent) locations. Appendices include a summary of all location and museum collection information, guidelines for conducting surveys and inventories of terrestrial mollusks, and a key to the genera of terrestrial mollusks in Montana. It is hoped that this document will 1) bring to the attention of Forest Service biologists the existence of a group of small animals of conservation concern that inhabit or may inhabit lands under their stewardship, and 2) help Forest Service biologists design and conduct forest inventories for these species. The ultimate goal of this document is to assure the long-term conservation of these species by having their needs addressed in forest plans.

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